

# BEST AVAILABLE COPY

- 24 -

## Patent claims

1. The use of distillers grains which, in addition to a fermentation with yeast, were also fermented with a yogurt culture and/or buttermaking culture, for producing a composition for preventing and/or treating increased blood sugar values.
2. The use as claimed in claim 1, wherein the increased blood sugar values are selected from fasting and/or postprandial blood sugar values.
3. The use as claimed in claim 1, wherein use is made of distillers grains having a residual starch content of a maximum of 4% by weight, based on the total weight of the distillers grains.
4. The use as claimed in one of claims 1 to 3 for producing a composition for preventing, and/or treating patients having, prediabetes and/or diabetes and/or a predisposition thereto, and associated forms and/or preforms.
5. The use as claimed in claim 4, wherein diabetes is selected from diabetes type Ia and Ib, type IIA and IIB and/or autosomally inherited diabetes of youth, and wherein the associated forms and/or preforms are selected from secondary diabetes forms, potential diabetes, latent diabetes, decreased glucose tolerance and/or clinically manifest diabetes.
6. The use as claimed in claim 5, wherein diabetes is type II diabetes.
7. The use as claimed in one of claims 1 to 6 for producing a composition for reducing body weight.
8. The use as claimed in one of claims 1 to 7 for producing a composition for preventing, and/or treating

patients having, adiposity.

9. The use as claimed in claim 8 for producing a composition for preventing, and/or treating patients  
5 having, adiposity, and simultaneously increased fasting blood sugar values.

10. The use as claimed in one of claims 1 to 9 for producing a composition for preventing, and/or treating  
10 patients having, metabolic syndrome.

11. The use as claimed in claim 10 for producing a composition for preventing, and/or treating patients  
15 having, insulin resistance, arteriosclerosis, lipid, protein and/or carbohydrate metabolic disorders.

12. The use as claimed in one of claims 1 to 11, wherein the distillers grains have a low glycemic index.

20 13. The use as claimed in one of claims 1 to 12, wherein distillers grains are used which were produced by the distillers grains being taken off directly from the still, then thickened, but not dried, and  
25 subsequently being fermented with milk and a yogurt culture and/or buttermaking culture.

14. The use as claimed in claim 13, wherein distillers grains are used which were produced  
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a) the distillers grains being thickened to approximately 15 to 17% dry mass at a pressure of 100 to 800 mbar,  
35 then

b) being mixed with a milk already inoculated with the yogurt culture and/or buttermaking culture,

- 26 -

- c) this mixture either being fermented with a yogurt culture for 10 to 20 hours at a temperature of 38 to 48°C

or

5 this mixture being fermented with a buttermaking culture for up to 36 hours at a temperature of 18 to 24°C, and thereafter
- 10 d) cooled, mixed with further milk or milk concentrate, to temperatures below 15°C, and
- e) which is optionally subsequently spray dried.
- 15 15. The use as claimed in one of claims 1 to 14, wherein use is made of distillers grains based on wheat, barley, rye, oats, corn and/or rice.
- 20 16. The use as claimed in one of claims 1 to 15, wherein the distillers grains are administered in a daily dose of 100 to 400 g.
- 25 17. The use as claimed in claim 16, wherein the distillers grains are administered in 2 to 5 individual doses per day.
- 30 18. The use as claimed in claim 17, wherein the distillers grains are administered in equally sized individual doses.
- 35 19. The use as claimed in one of claims 1 to 18, wherein the distillers grains are administered in viscous form.
- 20. The use as claimed in claim 19, wherein the distillers grains are administered in water or fermented milk.

21. The use as claimed in claim 19, wherein the distillers grains are administered in curdled milk, buttermilk, yogurt, quark or kefir.

5 22. The use as claimed in one of claims 1 to 21, wherein the distillers grains are administered as a meal replacement and/or meal supplement.

10 23. The use as claimed in claim 22, wherein the distillers grains are administered over a period of at least 3 successive weeks.

15 24. The use as claimed in one of claims 1 to 23, wherein use is made of the distillers grains in combination and/or together with further anti-diabetes acting or diabetes-preventing active ingredients.

20 25. The use as claimed in claim 24, wherein use is made of the distillers grains in combination and/or together with further active ingredients counteracting or preventing type II diabetes.

25 26. The use as claimed in either of claims 24 or 25, wherein use is made of the distillers grains in the form of, and/or in combination with, and/or together with, food supplements, functional food and/or special diet.

30 27. The use as claimed in claim 24 to 26, wherein use is made of the distillers grains in the form of, and/or in combination with, and/or together with, creatine, creatine monohydrate,  $\alpha$ -lipoic acid, phytosterol, polyunsaturated fatty acids and/or phospholipids and also their derivatives and/or mixtures.

35 28. The use as claimed in one of claims 1 to 27 for producing a composition having a regulating effect on the intestinal flora.

- 28 -

29. The use as claimed in claim 28, wherein the dietary fibers of the distillers grains exhibit this activity.

5 30. The use as claimed in claim 28 or 29, wherein the distillers grains are administered as a meal replacement and/or meal supplement.

10 31. The use as claimed in one of claims 28 to 30, wherein the distillers grains are administered with sufficient liquid.